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# Polk Inlet Timber Sale

## Final Environmental Impact Statement *Record of Decision*

DAVID J. HODA  
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**Polk Inlet Environmental Impact Statement**



**Polk Inlet Timber Sale  
Final Environmental Impact Statement**

**Record of  
Decision**

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# Record of Decision

## Background

In 1951 the Forest Service entered into a long-term timber sale contract with the Ketchikan Pulp Company (KPC) to harvest up to approximately 8.25 billion board feet (BBF), valid through June 30, 2004 (Contract No. A10fs1042). In response to the post war boom, commercial interest in Alaska timber, and the desire to establish a stable industry in Southeast Alaska, Congress authorized the Forest Service to develop this Long-term Contract and others.

The purpose and need for action is to (1) provide timber volume that will contribute to a 3-year current timber supply under the KPC contract (Sections BO.61 and BO.62) and/or to the Ketchikan Area Independent Timber Sale Program, and (2) move toward the desired future condition as identified in the TLMP Draft Revision (1991a), consistent with the Management Direction/Emphasis for each management area in the current Forest Plan (TLMP 1979a, as amended). The alternatives and actions considered are possible approaches to meeting this purpose and need. The EIS study process was designed to help ensure that, in meeting the purpose and need, the Forest Service makes the most informed decision possible for this Project Area specifically, and for the Tongass National Forest generally.

The timber volume determined for the Polk Inlet Project Area is approximately 125 MMBF, a volume that reflects management direction based on the current schedule to provide a 3-year timber supply for the KPC Long-term Contract (see Appendix A of the FEIS). There is also a need to contribute to the obligation set by Congress under Section 101 of the Tongass Timber Reform Act (TTRA) of 1990, directing the Forest Service "to the extent consistent with providing for the multiple use and sustained yield of all renewable forest resources, seek to provide a supply of timber from the Tongass National Forest which meets annual market demand..."

Public scoping, data collection and analysis, and document production began with issuance of the Notice of Intent published in the Federal Register on September 6, 1991. This Record of Decision (ROD) and the Final EIS disclose the environmental effects of the alternatives considered and document the decision for authorization of activities within the Project Area.

In developing the Final EIS and this ROD, it is recognized that less than complete knowledge exists about many relationships and conditions of wildlife, fish, forests, jobs, and communities. The ecology, inventory, and management of a large forest area is a complex and developing science. The biology of wildlife species prompts questions about population dynamics and habitat relationships. The interaction of resource supply, the economy, and communities is the subject matter of an inexact science.

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The data and level of analysis used in the Final EIS were commensurate with the importance of the possible impacts (40 CFR 1502.15). When encountering a gap in information, the interdisciplinary team (IDT) took one of two approaches: (1) they collected the missing information or conducted the analysis necessary to identify important relationships; or (2) they concluded that, although the missing information would have added precision to estimates or better specified a relationship, the basic data and central relationships are sufficiently well established in the respective sciences that the new information would be very unlikely to reverse or nullify understood relationships. Thus, any information missing from the Final EIS was determined to be not essential for a reasoned choice among the alternatives.

## Decision

This Record of Decision documents my decision to make timber volume available from the Polk Inlet Project Area that contributes to KPC Long-term Timber Sale Contract and Independent Timber Sale Program requirements. My decision encompasses the following:

- the volume to make available in this Project Area in multiple "timber offerings" or timber sales;
- the location and design of timber harvest units;
- the location and design of road systems;
- the location and design of log transfer facilities;
- necessary standards and guidelines, mitigation measures, and enhancement opportunities for resources other than timber;
- the implementation of ecosystem management, including the human component;
- whether there may be a significant restriction on subsistence use and if so, related findings and measures to minimize impacts on subsistence users;
- road management objectives, including closures for resource protection.

It is my decision to select Alternative F2 with modifications for implementation in the Polk Inlet Project Area (see the description of Alternative F2 in Chapter 2 of the Final EIS). This decision is responsive to issues raised during scoping, data gathered and analyzed, public responses to the Draft EIS, and testimony received at the subsistence hearings. A heightened awareness of what is necessary for maintaining well-distributed wildlife populations within the Tongass National Forest was also considered in my decision. This issue warranted special consideration on this Project due in part to previous harvest activities on adjacent public and private lands.

I modify Alternative F2 by making the following specified minor changes. These modifications are not a substantial change to Alternative F2 which are relevant to the environmental concerns; nor do they represent significant new circumstances or information relevant to the environmental concerns and bearing on Alternative F2 or its impacts.

Units 618-203, 618-205, 618-216 and 618-221 on the eastern shore of McKenzie Inlet are added to the Selected Alternative. These units will be partial cut and harvested with helicopter logging. These units and their effects were displayed in Alternative 5 of the Draft Environmental Impact Statement. This results in an increase of 5.6 MMBF and 165 acres of timber harvest.

Unit 622-269—Delete Road #10065 leading to and across the unit and Road #10069, which is a spur inside the unit, and change the logging system to helicopter yarding. The harvest system will be changed to a Type C clearcut. This will eliminate approximately 4,500 ft of road construction in the Indian Creek watershed which will help to maintain water quality and minimize the extension of the road system in this watershed. A revised Unit Design Card is provided in the Appendix of this Record of Decision.

Harvest unit 620-209 south of the small HCA located in the Dog Salmon Creek drainage will be changed to a partial cut for the entire unit, resulting in a decrease of 0.3 MMBF. This change is intended to increase the effectiveness of the small HCA and its connectivity to retention blocks to the south. A revised Unit Design Card is provided in the Appendix of this Record of Decision.

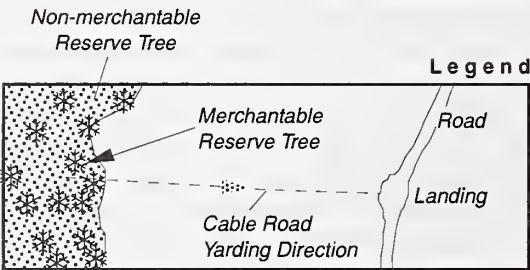
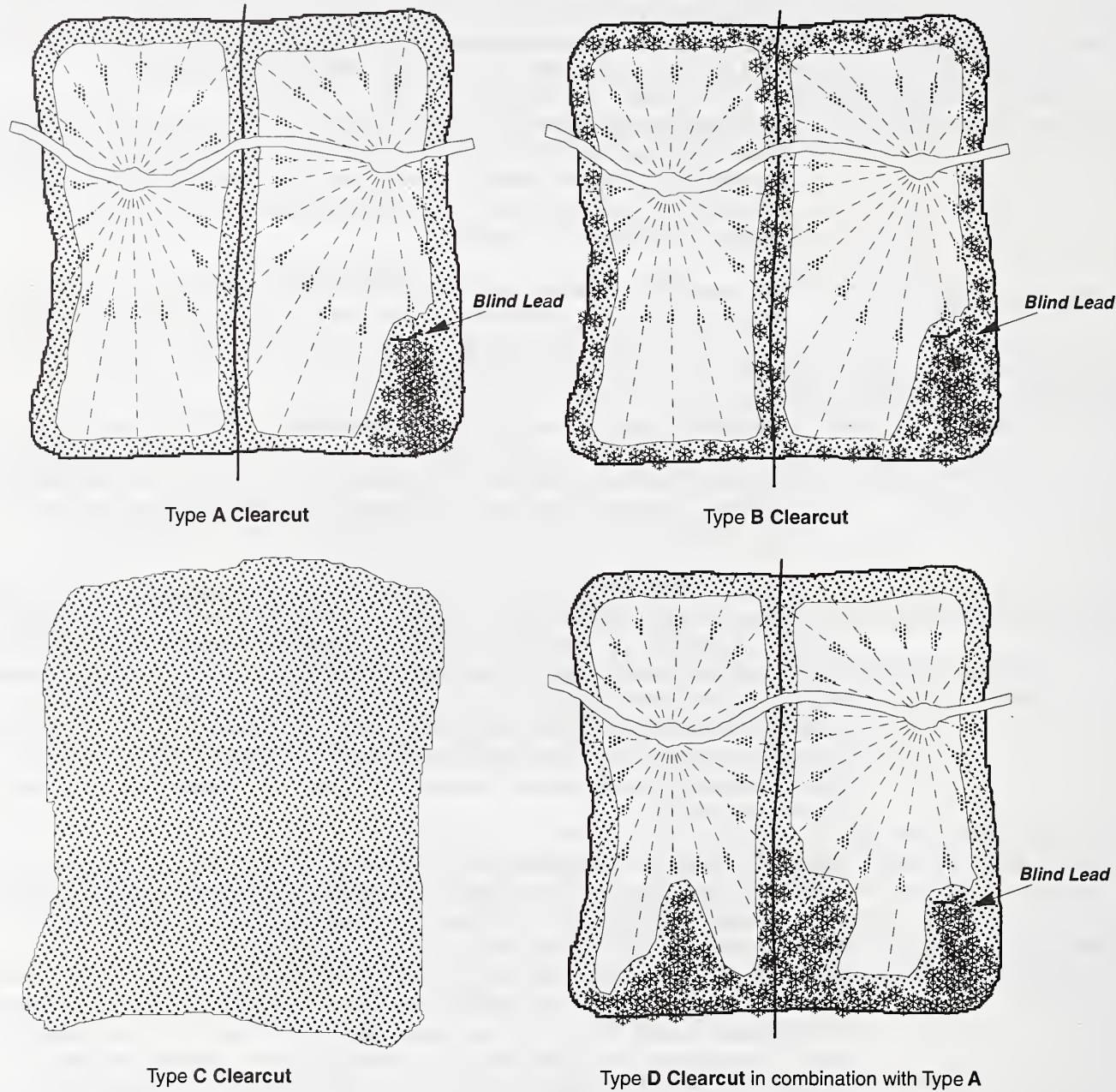
The medium HCA on McKenzie Inlet and the Old Tom Creek Research Natural Area is adjusted by deleting the section on the eastern portion of McKenzie Inlet and adding a section to the western edge of the HCA in the vicinity of Goose Bay. The revised HCA is depicted on the Record of Decision map.

In summary, these modifications result in a net increase in timber harvest of 4 units producing 5.6 MMBF by partial cut harvest of 165 acres. The modifications also result in changing 20 acres from clearcut to partial cut (with an accompanying reduction of 0.3 MMBF), a reduction of 4,500 feet of road construction, and changing 44 acres from a Type A to a Type C clearcut. All other effects are the same as Alternative F2.

1. The Selected Alternative will harvest approximately 4,116 acres of commercial forest land to contribute to the requirements of the KPC Long-term Timber Sale Contract and the Independent Timber Sale Program. This specified harvest will provide approximately 108 MMBF of sawlog and utility volume from 92 harvest units and 5 MMBF of right-of-way (ROW) volume, for a total of 113 MMBF. Design features of the harvest units are described in detail on the Harvest Unit Design Cards in Appendix E of the Final EIS. Chapter 4 of the Final EIS displays the harvest units greater than 100 acres and the reasons for exceeding this size. Integrated silvicultural prescriptions have been developed for each unit. An example is shown in Appendix G of the Final EIS.
2. The Selected Alternative includes partial-cut harvest, rather than clearcut harvest, for 605 acres. This is consistent with Forest Service Chief's policy to reduce the use of clearcutting as a standard timber harvest practice on National Forest lands (as outlined in the Chief's June 4, 1992 letter in conjunction with the adoption of ecosystem management). The partial-cut harvest prescriptions for these units are intended to provide for greater structural diversity on a stand level, promote regeneration (especially western-red and yellow cedar), maintain riparian habitat, maintain scenic quality, and leave young, vigorously growing trees. The remaining acres are scheduled for one of four types of clearcutting (Figure 1). All clearcut types are designed to allow for the retention of reserve trees. Type A clearcuts (1,546 acres in the Selected Alternative) leave safe snags and unmerchantable reserve trees within a 50- to 100-foot border along setting boundaries. Type B clearcuts (668 acres in the Selected Alternative) are similar, except a specified number of snags and live tree replacements with minimum diameter limits are retained within the 50- to 100-foot border. Type C clearcuts (722 acres in the Selected Alternative) leave unmerchantable trees and safe snags over the entire unit. Type D clearcuts (576 acres in the Selected Alternative) provide clumps of reserve trees in islands or fingers within the harvest unit and generally result in 4 to 6 acres of retention within or adjacent to each unit. Appendix B of the Final EIS displays a list of harvest units by alternative, for which each type of harvest is prescribed. The Harvest Unit Design Cards in Appendix E of the



Figure 1.  
Schematic Diagram of Clearcut Types with Reserve Trees



Final EIS and the Integrated Silvicultural Prescriptions provide specific direction for field layout to accomplish these objectives.

3. The Selected Alternative includes construction of an estimated 41 miles of new system road in order to access the selected timber harvest units. Appendix F of the Final EIS contains the Road Cards with direction for the location of each road. The Road Cards list road segments and road management objectives (including closures) for future management of the transportation system.

4. The existing Log Transfer Facilities (LTF's) located on the east shore of Twelvemile Arm and on the west shore of Polk Inlet will be used to transfer logs to the water after timber harvest. In addition, new LTF's to be developed for transfer of logs to be harvested under authorization of the 1989-94 KPC Long-term Sale EIS at Little Coal Bay (on the south side of Kasaan Bay), and on the east shore of McKenzie Inlet will be used.

Polk Inlet Project units in VCU 612 and the eastern portion of VCU 613, collectively called the Little Coal Bay units, were evaluated with the 1989-94 units in the same area. The Polk Inlet Final EIS evaluated accessing the Little Coal Bay area from the east and west via private land facilities, in lieu of building the LTF authorized under the 1989-94 EIS. The analysis indicated that these access options would be similar or slightly higher in cost and similar or lower in effects. It is possible that the timber sale purchaser may request access via private lands. This may be authorized after appropriate appraisal and subsequent selling value adjustments are approved. In lieu of permanent right-of-way, temporary easements that provide short-term access, as described in FSM 7730 and FSM 7709.59, will be adequate for National Forest purposes in the Little Coal Bay area.

5. This Record of Decision identifies mitigation measures authorized to reduce or eliminate adverse environmental effects of the timber harvest and road construction activities specified in the Selected Alternative. Chapter 2 of the Final EIS specifies the monitoring that will be conducted to determine if the resource management objectives have been met.

6. I have identified certain lands which contain important wildlife habitat which will remain in their current condition for the duration of this project. These lands are generally depicted on the map labeled Old Growth Retention Strategy A in Chapter 2 of the Final EIS. The retention strategy incorporates blocks of old growth, referred to as Habitat Conservation Areas (HCA's). However, the block that is located on McKenzie Inlet and the Old Tom Creek Research Natural Area is to be adjusted to the west as follows: the portion on the eastern edge of McKenzie Inlet will be deleted, and portion on the western boundary will be added to compensate in the vicinity of Goose Bay (see Record of Decision map). The old-growth retention strategy also identifies corridors that are important for maintaining connectivity between blocks, but which are not themselves identified as retention.

No harvest is permitted within the blocks (HCA's). Harvest is permitted within the corridors consistent with the continued functioning of the corridors. Subsequent projects and NEPA analysis may specify changes in the locations of these areas; however, sufficient acreage will exist in an old-growth condition to meet the requirements for the Old Growth prescription specified in the 1979 Tongass Land Management Plan (as amended) for so long as said requirements remain in place.

7. I have determined that there may be a significant possibility of a significant restriction of subsistence use of deer in the Project Area in the future. Although the analysis in Chapter 4 of the Final EIS indicates that no such restriction of subsistence use in the Project Area will likely



occur through the year 2004, increased demand and cumulative effects of future actions may result in a significant restriction of subsistence use of deer in the Project Area at some point. Furthermore, there is a significant possibility of a significant restriction of subsistence use of black bear and marten in the Project Area at present, due primarily to competition between subsistence users and residents of nonrural communities.

I have taken reasonable steps to minimize adverse impacts on subsistence uses and resources. These include: avoiding harvest and road construction in areas of high subsistence use and in high value wildlife areas, developing and implementing an old-growth retention strategy that is consistent with current thinking in conservation biology, reducing the amount of clearcutting and prescribing clearcuts that maintain greater structural diversity, and closing selected roads to the public after timber harvest to minimize effects on black bear and marten. Because of these steps, additional adverse effects on subsistence associated with the Polk Inlet Project should be minimal. Further, the Selected Alternative is necessary, consistent with sound management of public lands, and involves the minimum amount of public lands necessary to accomplish the purpose and need.

## Reasons for Decision

1. In making my decision, I worked hard to assure consideration of all issues and to take into account the competing interests and values of the public. There were many divergent public, personal, and professional opinions expressed during this project. This decision will probably not completely satisfy any one particular group or individual. However, I considered all views, and I believe the decision I have made is reasonable. The Selected Alternative provides a beneficial mix of resources for the public within the framework of the existing laws, regulations, policies, public needs and desires, and capabilities of the land, while meeting the stated purpose and need for this project.

2. My decision to implement this Selected Alternative is in conformance with the Tongass Land Management Plan (TLMP 1979) as amended, and sound National Forest management. I have considered the need to help maintain a current timber supply to KPC (as required by the KPC Long-term Timber Sale Contract) and to the Independent Timber Sale Program in support of community stability. I have also considered the need to provide strong conservation measures for fish, wildlife, and other resources important to subsistence, recreation, commercial, and other uses.

3. I have chosen Alternative F2 with modification over the other alternatives because it best approximates the purpose and need of the project while providing for a balance of economic and resource conservation considerations. In addition to the purpose and need, some of the key considerations in my decision among the alternatives were: a) old-growth retention strategies; b) water quality issues in Fubar Creek watershed; c) subsistence and water quality issues in Indian Creek watershed; and d) long-term economics.

The old-growth retention strategy associated with Alternative F2 assures that options are available to address the short and long-term maintenance of well distributed viable wildlife populations, especially for species that require old-growth habitat. Alternative F2 also provides for the maintenance of water quality in Fubar Creek watershed by deferring all road construction and timber harvest in this watershed. Even though Alternative F2 reenters Indian Creek watershed, I have concentrated this entry into the upper portion of the watershed in the vicinity of previous harvesting. I have also minimized new road construction this entry to better

respond to subsistence and water quality concerns raised by the public, including the State of Alaska, throughout the EIS process. By entering the already fragmented area of Indian Creek, we can delay fragmentation of other areas, while still contributing timber volume for the purpose and need. Finally, Alternative F2 provides for a balance of logging systems which should provide a better balance of short and long-term timber economics.

4. I have determined that the harvest volume of the Selected Alternative approximately meets the purpose and need defined for the project.

5. I have deferred timber harvest in the majority of the large, unfragmented blocks of old growth, which have been identified as having high value for wildlife. My objective is to maintain their integrity for as long as possible as we continue to learn more about old-growth dependent species, and to maintain options for various viable population strategies being considered in the Forest Plan Revision. In addition, corridors, important for connecting the blocks, have been identified, and harvest within them is allowed only to the extent that their ability to function as a travel corridor is not compromised. The large unfragmented blocks that I have maintained include: the west shore of Twelvemile Arm; the east shore of Twelvemile Arm and portions of Old Franks watershed; Old Tom Creek, Goose Bay, and west shore McKenzie Inlet; Sunny Creek and the north shore of Cholmondeley Sound; and the Big Creek and Cannery Creek area. These areas were identified by either the State of Alaska, the Inter-agency Viable Population Committee, or the Interdisciplinary Team as important old-growth blocks. They will be retained as old-growth habitat for the duration of this project. This decision will defer harvest activities in them only for the duration of this project. Any future harvest will be considered through the NFMA and NEPA process.

6. The Selected Alternative is consistent with the proportional harvest requirements specified in the Tongass Timber Reform Act (TTRA) as outlined in the Forest Service Sale Preparation Handbook. The proposed harvest units include a lower proportion of volume classes 6 and 7 than the TTRA baseline. Proportionality analysis is presented in the Vegetation and Timber Resources section of Chapter 4 of the Final EIS.

As a result of the April 11, 1994 Wildlife Society v. Barton Court Order regarding Kelp Bay Final EIS and ROD, the Forest Service is currently evaluating several alternative methods for proportionality calculation (Wilson and Golnick, 1994). Proportionality calculations for future entries into Management Areas K17 and K18 will comply with the new methods selected.

7. I have ensured that all alternatives including the Selected Alternative meet the visual quality objectives (VQO's) as specified from the priority travel routes and their viewsheds. Actual viewpoints used in the analysis for meeting the VQO's for each viewshed are specified in Chapter 3 of the Final EIS.

8. I have designed the Selected Alternative so that only four units or combinations of units will exceed 100 acres. The units which do exceed 100 acres are justified on the basis of topography, effects upon wildlife and fish habitat, and transportation and harvest system requirements. These units were described in Chapter 4 of the Draft EIS and are also described in Chapter 4 of the Final EIS.

9. In the development of the Selected Alternative, I have taken action to implement the Chief's policy on ecosystem management and a reduction in clearcutting. I have specified that approximately 605 acres will be harvested using partial cutting silvicultural treatments to provide for greater structural diversity on a stand level, promote regeneration (especially red and yellow cedar), maintain riparian habitat, maintain scenic quality, and leave young, vigorously growing



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trees. Partial cutting is a relatively new silvicultural system in Southeast Alaska. However, the units for which partial cutting is prescribed were identified and designed to ensure the success of the regeneration. Prescriptions include removing a portion of the trees within the unit, while successfully retaining individual trees, and/or groups of trees. The specific harvest objectives are described in the Harvest Unit Design Cards and the Integrated Silvicultural Prescriptions. Silviculture and logging system specialists will apply this direction in the preparation of the units for harvest. Sale administrators will ensure that the logging operations accomplish the harvest objectives for these units. Implementation of these prescriptions is intended to add to our knowledge of alternate treatments for Southeast Alaska timber types.

10. All timber harvest in the Selected Alternative, except that described above, is prescribed for clearcut harvest. Clearcutting meets the objective of maintaining fast growing, mistletoe-free stands of mixed species and is the optimum method of harvesting. However, all clearcut units incorporate ecosystem management principals by prescribing reserve trees to enhance structural diversity. Four types of clearcuts are planned, based on the degree of reserve tree retention (Figure 1). The specific objectives for each unit are listed in the Unit Design Cards and Integrated Silvicultural Prescriptions.

11. Although I am not selecting proposed units 674-213, 674-253, and 674-265 and the associated road and LTF, as shown in Alternative 4 of the Final EIS, I will consider these proposed activities with the Chasina EIS Project in the near future. Including the proposed Polk Inlet activities with the proposed Chasina activities tributary to the common LTF, should produce a more logical and economical sale package for this area.

Similarly, proposed units 675-206, 675-208, 675-209, 675-210, 675-226, 675-228, 675-235, 675-237, 675-239, 675-242, and 675-243 and the associated roads and LTF in the Sunny Cove area as shown in Alternative 3 will be considered with the Cholmondeley EIS Project in the near future.

12. The selected alternative will provide a reasonable economic return to the Federal Government while still meeting the previously mentioned resource objectives. The average mid-market stumpage value for the Selected Alternative is approximately \$25.44 to \$39.55 per thousand board feet.

## How Issues Are Addressed

In the following summary, I detail how the Selected Alternative addresses each of the significant issues. Refer to Chapter 2 of the Final EIS to supplement the following discussion and provide a comparison of the proposed activities and environmental consequences of the alternatives.

### Issue 1: Wildlife Habitat

The greatest direct effect on wildlife habitats would be the conversion of old-growth forest and a change in forest habitat conditions. Special emphasis habitats such as beach and estuary fringe are protected through timber harvest unit design and road location. The Selected Alternative would not reduce any of the habitat types in the Project Area more than 6 percent (see Chapter 4 of the Final EIS). All alternatives would result in impacts consistent with implementation of the current TLMP and Alternative P of the Proposed 1991 Forest Plan Revision.

The Selected Alternative, would decrease current habitat capabilities for all Management Indicator Species (MIS) by 5 percent or less. Habitat capability is calculated utilizing models, and does not necessarily indicate current or future populations, but rather is a means to estimate potential effects on habitat.

Forest fragmentation is another indicator of potential effects on wildlife. Increased amount of forest fragmentation indicates reduced habitat potential for species which are thought to be dependent on interior old-growth forest habitat. One way to analyze forest fragmentation is to measure the reduction of large, contiguous blocks of old-growth forest. The Selected Alternative was specifically designed to retain important old-growth blocks by avoiding entry into areas that have not already experienced some harvest. It complies with an old-growth retention strategy that provides for three medium Habitat Conservation Areas, which total approximately 37,000 acres in size and include approximately 16,000 acres of old growth, four small Habitat Conservation Areas, which total approximately 16,000 acres and include approximately 8,000 acres of old growth, and nine corridors designed to connect the Habitat Conservation Areas. These corridors were identified in conjunction with the corridors provided by beach fringe and estuary buffers, stream and lake buffers, and other areas not scheduled for harvest. The retention strategy associated with the Selected Alternative is shown on the Record of Decision map.

Region 10 goshawk management guidelines in effect at the time of unit release will be followed. The interim guidelines issued August 18, 1992, call for no harvest within the immediate timber stand (20-30 acres) containing an identified nest tree, limited harvest (five percent per decade) within the adjacent 600 acres (post-fledging area), and mapping out approximately 6,000 acres for foraging area.

## Issue 2: Fish Habitat and Water Quality

Chapter 4 of the Final EIS concludes that the potential effects on fish habitat and water quality are minimal for all action alternatives. All alternatives meet the requirements and the intent of the Clean Water Act and the Tongass Timber Reform Act. Implementation of the TTRA requirement to provide a minimum 100-foot buffer on Class I streams and Class II streams flowing directly into Class I streams and the additional buffer requirements identified in the standards and guidelines of the Draft Forest Plan Revision (1991) will effectively mitigate direct stream channel impacts from proposed timber harvest and road construction activities. Adherence to Best Management Practices (BMP's outlined in the Soil and Water Conservation Handbook (FSH 2509.22) during timber harvest and road construction activities will minimize the potential for impacts on fish habitat. BMP's are noted on individual Harvest Unit Design Cards and Road Cards.

In a memo to District Rangers dated December 31, 1992, I directed that actions be taken immediately to ensure that all TTRA buffers meet the minimum 100-foot width, or the minimum width prescribed to meet standards and guidelines for streams when the buffer is greater than 100 feet in width. These actions include a quality control program to ensure accurate measurement of the minimum buffer width and length, and finally, training personnel to fully implement TTRA buffers. The District Ranger will be held fully accountable for proper implementation of TTRA requirements.

The Final EIS also predicts that no significant changes in stream temperature regimens, large woody debris recruitment, or stream nutrient cycles are expected as a result of timber harvest activities. Riparian buffers and stream crossings as prescribed on the Harvest Unit Design Cards and Road Cards will minimize any adverse effects on water quality and fish habitat resulting from the authorized activities.



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The Alaska Department of Environmental Conservation's 1992 report on Section 303(b) of the Clean Water Act classifies Fubar Creek as "impaired." Since the Creek is still impaired for fish habitat due to past management activities and reoccurring natural disturbances, all proposed units in this drainage will be deferred from the Selected Alternative. The Forest will continue monitoring the recovery process of the fish habitat of Fubar Creek to determine whether it needs continued deferral from management activity or if recovery is sufficient to remove the stream from the 303(b) list.

Each alternative also has limits specified on the amount of cumulative watershed disturbance as described by the standards and guidelines in the Draft Forest Plan Revision (1991). All alternatives will limit the amount of cumulative watershed disturbance within each third order or larger watershed to less than 35 percent of the total watershed land base within a 15-year period. Furthermore, cumulative timber harvest will not exceed 25 percent of the acres associated with Class III streams in the high gradient contained riparian process group every 20 years for each 3rd order or larger watershed. In addition to these measures of watershed risk, the watershed evaluation procedure also utilized updated stream information from site-specific field reconnaissance; the relative risk to streams based on the quantity, type, and location of stream buffers; the acres of potential soil disturbance; the acres of harvest on high mass movement hazard areas; and other factors.

Chapter 4 of the Final EIS concludes that the potential effects on the marine environment will be localized and are minimal for all alternatives. All LTF's in the Project Area have been designed to maximize flushing of suspended bark away from the LTF area to deep water before it can accumulate on the bottom. All alternatives meet the requirements and the intent of the Clean Water Act Section 404 (b)(1), and the Tongass Timber Reform Act. Adherence to Alaska Timber Task Force siting guidelines and Best Management Practices (BMP's) outlined in the Soil and Water Conservation Handbook (FSH 2509.22) during transfer and rafting activities will minimize the potential for impacts on the marine environment.

### Issue 3: Subsistence

This issue reflects public concern for the availability of wildlife, fish, and other resources for customary and traditional use by rural Alaska residents. The Alaska National Interest Lands Conservation Act (ANILCA) requires the Forest Service to determine if proposed activities may significantly restrict use of subsistence resources. If such a finding is made, then ANILCA requires public hearings and determinations regarding actions to minimize impacts prior to proceeding with a project.

Chapter 4 of the Final EIS contains the ANILCA 810 subsistence analysis. That analysis concludes there may be a significant possibility of a significant restriction of subsistence use of deer in the Project Area in the future. The analysis, however, also concludes that there is no significant possibility of a significant restriction of subsistence use of Sitka blacktail deer in the Project Area for any communities or users of the Project Area at the present time, nor is there a likely restriction projected through 2004. However, long-term cumulative effects of potential future actions, with increased demand, may result in a restriction. The analysis also concludes that there is a significant possibility of a significant restriction of subsistence use of black bear and marten in the Project Area at present, due primarily to competition between subsistence users and residents of nonrural communities. This possibility would increase with implementation of any of the action alternatives.

A number of measures have been incorporated into the Selected Alternative to minimize adverse impacts on subsistence uses and resources. They were incorporated in large part to be responsive to area residents and concerns raised by the subsistence users of the areas. These include: avoiding harvest and road construction in areas of high subsistence use and in high value wildlife areas, developing and implementing an old-growth retention strategy that is

consistent with current thinking in conservation biology, reducing the amount of clearcutting and prescribing clearcuts that maintain greater structural diversity, and closing selected roads to the public after timber harvest to minimize effects on black bear and marten. Because of these steps, additional adverse effects on subsistence associated with the Polk Inlet Project will be minimal. Cumulative effects of the alternatives over the rotation do not produce a significant possibility of a significant restriction for subsistence resources other than deer, black bear, and marten.

The Selected Alternative reflects efforts by the Forest Service to minimize effects on subsistence resources used by those rural communities that would be most likely to receive the highest priority for game in the event of an ANILCA Section 804, Tier II restriction. The Selected Alternative avoids timber harvest in the vicinity of Hollis, including the Maybeso Experimental Forest and most of the Harris River watershed, including the Twentymile drainage. In addition, only minimal road construction and reduced harvest will occur in the Indian Creek watershed. Only limited harvest will occur along the Hydaburg Road and Twelvemile Arm. Harvest activities will be avoided near Goose Bay, in the west side McKenzie Inlet area, and along the West Arm of Cholmondeley Sound, including the Sunny Creek and Cannery Creek watersheds.

## Issue 4: Timber Economics and Supply

The Selected Alternative produces an average mid-market stumpage value of approximately \$25.44 to \$39.55 per thousand board feet. Actual returns from the harvest will be determined for each timber offering based on current market conditions as determined through the Timber Sale Appraisal process.

Another indicator of timber harvest economics is the amount of helicopter logging required. Generally speaking, the most expensive logging system is helicopter, followed by slackline. Only one alternative largely avoids helicopter yarding (Alternative 4); all other action alternatives, including the Selected Alternative, have between 24 and 38 percent of the harvest acres requiring helicopter yarding. The Selected Alternative contains 32 percent of the acreage in helicopter yarding. Portions of the Polk Inlet Project Area have been entered extensively in the past without helicopter yarding. In addition, many portions of the Project Area, that have not yet been entered, are steep and present major problems for road construction. Therefore, future harvest entries into this Project Area will require considerable helicopter yarding. It was not reasonable to postpone all helicopter yarding for future projects.

A timber supply analysis for Prince of Wales Island is provided in Chapter 4 of the Final EIS. This analysis addresses a variety of factors that could affect the future timber supply.

## Issue 5: Visual Quality, Recreation, and Tourism

This issue addresses concerns for outdoor recreation, scenic viewing, and tourism opportunities offered in and around the Polk Inlet Project Area and the effects timber harvest and transportation system development may have upon these opportunities.

The Selected Alternative locates timber harvest largely within previously harvested areas and increases development primarily within existing developed areas. No changes would occur in the visual quality of the sensitive area along the Alaska Ferry Route and near the community of Hollis. Effects on the visual quality inside Twelvemile Arm would occur only on the east side of the middle part of the Arm. No harvest activities would be visible from future recreation sites at the head of the Arm. The only change that would occur within the viewing corridor along the Hollis-Klawock Highway would be at the junction with the Hydaburg Road. Only three to four additional harvest units would be visible along the Hollis-Klawock Highway, Hydaburg Road, and Forest Road 21 to the head of Twelvemile Arm combined, depending on direction of travel. No changes would occur in Cholmondeley Sound including Sunny Cove.



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Timber harvest would have minimal effects on existing and potential recreation sites. Opportunities for tourism would also be minimally effected because of the minor harvest visible in areas with high tourism potential (i.e., Twelvemile Arm, Hollis-Klawock Highway, Hydaburg Road, and Cholmondeley Sound).

### Issue 6: Social and Economic Factors

This issue reflects concern about economic development and employment, and about maintaining Alaskan lifestyles. Social and economic effects are important to the Forest Service in land management decisions. Land use designations, scheduling of activities and rural development program decisions, are all made with consideration of social and economic effects.

Implementation of the Selected Alternative authorizes harvest of approximately 108 MMBF of timber volume from harvest units, and 5 MMBF from road rights-of-way, for a total of 113 MMBF. Additionally, it authorizes new road construction on approximately 41 miles of road. The Selected Alternative provides raw materials to support the Southeast Alaska timber industry. Harvest of this level will produce, on the average, 217 jobs annually over the next 4 years.

None of the alternatives is projected to have any effect on income or employment opportunities in the sport or commercial fishing industries or those related economic sectors. Because the alternatives affect few recreation sites, unroaded areas and areas important for tourism, no significant impact is expected on employment and income opportunities in the recreation and tourism industry.

Include in Chapter 4 of the Final EIS is an analysis of the social and economic effects related to changes in the timber supply.

### Issue 7: Local Water Supplies

Timber harvest and road construction activities are not expected to affect local water supplies in the Project Area. No road construction or timber harvest will take place near water supplies for homes and cabins near Hollis, Sunny Cove, or Cannery Creek under the Selected Alternative.

### Issue 8: Cave Resources

Potentially significant cave resources were identified in one harvest unit of the Selected Alternative. Mitigation measures would be implemented to avoid impacts to these resources, unless further surveys determine that there are no significant resources present. Field crews will be instructed to look for cave or karst resources during unit and road layout. If further resources are identified, mitigation measures will be implemented to avoid impacts. In addition, the karst vulnerability assessment process, recently developed by the Ketchikan Area, will be implemented prior to timber harvest or road construction associated with the Polk Inlet Project and any significant karst resources that are identified through this process will be protected by application of appropriate standards and guidelines.

## Public Involvement

Public involvement has been instrumental in the identification and clarification of issues for this project. This has been helpful in the formulation of alternatives and has assisted me in making more informed decisions for the Polk Inlet Project. Public mailings, Federal Register notices, news releases, open houses, subsistence hearings, and group and individual meetings

were some of the tools used to solicit public input for the project. Public scoping and involvement activities for the Polk Inlet Project are described in Chapter 1 of the Final EIS.

## Coordination With Other Agencies

From the time scoping was initiated, meetings and other contacts with interested State and Federal agencies have occurred. Issues were discussed and information was exchanged. Key meetings and contacts are listed in Chapter 1 of the Final EIS. Chapter 7 of the Final EIS (see List of Agencies, Organizations, and Individuals to Whom Copies of this Statement Were Sent) identifies the agencies who were informed of and/or involved in the planning process.

In addition to consultation conducted prior to the Final EIS, my staff held information meetings to present our proposed old-growth retention strategy and to discuss State comments on the Draft EIS with the relevant State agencies in Juneau and in Ketchikan. A similar meeting was held with the U.S. Fish and Wildlife Service in Juneau to discuss the proposed old-growth retention strategy and species listed as threatened and endangered or proposed for listing under the Endangered Species Act.

## Description of Alternatives

### Alternatives Eliminated from Detailed Study

A number of alternatives were examined, but not considered for detailed study in this EIS. This section summarizes those alternatives and the rationale for not considering them further. For a more complete description of these alternatives, refer to Chapter 2 of the Final EIS.

#### Alternative A

This alternative equates to the entire project unit pool. It was not considered in detail because it exceeds the stated purpose and need by 52 MMBF, based on the refined unit boundaries and prescriptions in the Final EIS.

#### Alternative B

Several public and agency comments requested that a significantly reduced harvest alternative be analyzed, with no specific harvest volume proposed. Because of the defined purpose and need of the project, a lower volume alternative was not considered in detail. Furthermore, issues that related to site specific areas within the project were addressed within the alternatives studied in detail. More information on why lower volumes were not considered is included in Appendix A of the Final EIS.

## Alternative C

Several public comments recommended an alternative that would keep intact all previously mapped old-growth retention and extended rotation during this entry. The ID Team analyzed this alternative during the Draft EIS stage to the extent of determining that the maximum volume that could be achieved was approximately 23 MMBF less than the stated purpose and need. Even though the volume of Alternative C approximates the Selected Alternative, I believe, based on my review, the old-growth retention strategy developed for the Selected Alternative goes beyond the retention provided by previously mapped old growth, does a better job of preserving larger blocks of old growth, and is more consistent with current conservation biology theory. Therefore, this alternative was not considered in detail in the Final EIS, as well. The effects of the alternatives on previously mapped old growth are considered in Chapter 4 of the Final EIS.

## Alternatives Considered for Detailed Study

Four action alternatives for making timber available from the Polk Inlet Project Area and two no action alternatives were considered in detail. Each action alternative is consistent with the TLMP (1979a, as amended) and Alternative P of the TLMP Draft Revision (1991a). For each alternative this section provides a discussion of the framework or emphasis of the alternative and various resource outputs associated with implementation. For a complete description of each alternative including maps, refer to Chapter 2 of the Final EIS.

### Alternative 1 (No Action)

**Framework**—This alternative would result in no new timber harvest or road construction in the Polk Inlet Project Area that is additional to the timber harvest cleared by the 1989-94 EIS. It does not preclude timber harvest from units analyzed under the 1989-94 EIS, but not yet felled as of the date of this ROD. Under this alternative, replacement timber volume would probably not be available from elsewhere within the Ketchikan Area. The CEQ regulations 40 CFR 1502.14d requires a "No Action" alternative be analyzed in every EIS to serve as a benchmark by which effects of the action alternatives are to be measured.

**Outputs**—There are no new timber harvest outputs associated with this alternative. Timber harvest and road and LTF construction would halt after full implementation of the 1989-94 EIS.

### Alternative 1a (No Action/No Harvest)

**Framework**—The framework of this alternative is to propose no new timber harvest or road construction from the Polk Inlet Project Area effective on the date of the Polk Inlet ROD. It precludes timber harvest from units analyzed under previous NEPA documents, but not yet felled as of the ROD date. Under this alternative, replacement timber volume would probably not be available from somewhere else within the Ketchikan Area. This alternative serves as an additional benchmark by which effects of the action alternatives can be measured.

**Outputs**—There are no new timber harvest outputs associated with this alternative; rather, there is a reduction in timber-harvest-related outputs relative to Alternative 1. Alternative 1a would eliminate the harvest of an estimated 52 units totaling approximately 2,587 acres and 75 MMBF. Alternative 1a would also eliminate the need for construction of about 35 miles of new roads and the development of three LTF's two at McKenzie Inlet and one near Little Coal Bay.



## Alternative F2

**Framework**—The framework of this alternative is to accelerate progress toward the desired future condition for timber management while meeting Forest Plan Standards and Guidelines for other resources, giving consideration to specific scoping issues. Emphasis was placed on Management Area K17, which is in the KPC Primary Sale Area. Scoping issues given emphasis in the selection of units included: wildlife habitat (Issue 1); water quality (Issue 2); subsistence (Issue 3); timber economics (Issue 4); and visual quality, recreation, and tourism (Issue 5). The wildlife habitat issue, specifically the effects of the project on old growth habitats, was addressed by implementing an old growth retention strategy which avoids harvest in large, unfragmented blocks of old growth and allows only limited harvest in corridors important for connecting these blocks. The water quality issue was addressed by avoiding harvest and road construction in the Fubar Creek watershed. The subsistence issue was addressed by focusing on the wildlife issue and by limiting harvest and road construction activities along Twelvemile Arm and Indian Creek and avoiding harvest and road construction in the vicinity of Hollis, and along Cholmondeley Sound. The visual quality, recreation, and tourism issue was addressed by limiting or avoiding harvest in these same areas.

**Outputs**—Implementation of this alternative would schedule the harvest of 3,951 acres, in 88 harvest units for approximately 103 MMBF of sawlog and utility volume. Average unit size would be about 45 acres and 4 units would exceed 100 acres. In addition to the unit volume, 5 MMBF of road right-of-way volume would be harvested, for a total of 108 MMBF of sawlog and utility volume. Of this harvest, 420 acres are planned for partial cut; the remainder are planned for clearcut harvest. The retention of reserve trees is planned to varying degrees in all units proposed for clearcutting. To implement this level of harvest, 42 miles of new road would be constructed. Alternative F2 schedules 1,108 acres in 27 units for helicopter yarding. Preliminary analysis indicates a net mid-market stumpage value of \$27.33 to \$39.53 per MBF.

No new LTF's would be needed. Harvested timber would be hauled to existing LTF's on Twelvemile Arm and Polk Inlet and to the LTF already scheduled for development at Little Coal Bay. The existing logging camp at Polk Inlet is all that would be required to support the harvest of approximately 98 MMBF. Harvest of the remaining 10 MMBF would require the support of a floating camp near Little Coal Bay; this camp would need to be developed to support the 1989-94 authorized harvest as well.

## Alternative 3

**Framework**—The framework of this alternative emphasizes limiting harvest to Management Area K17 to the maximum extent and includes only enough Management Area K18 units to bring the volume close to 125 MMBF. Harvest units selected from Management Area K18 are arranged in logical groupings and emphasize geographic areas not included in other alternatives.

**Outputs**—If Alternative 3 were implemented, it would result in the harvest of 4,711 acres, in 113 harvest units for approximately 112 MMBF of sawlog and utility volume. Average unit size would be about 40 acres and 4 units would exceed 100 acres. In addition to the unit volume, approximately 7 MMBF of road right-of-way volume would be harvested, for a total of 119 MMBF of sawlog and utility volume. Of this harvest, 790 acres are planned for partial cutting; the remainder are planned for clearcut harvest. The retention of reserve trees is planned to varying degrees in all units proposed for clearcutting. To implement this level of

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harvest, 56 miles of new road would be constructed and 1.5 miles of existing road would require reconstruction. Alternative 3 schedules 1,777 acres in 40 units for helicopter yarding. Preliminary analysis indicates a net mid-market stumpage value of \$4.54 to \$20.01 per MBF.

One new LTF would be needed near Sunny Cove for the harvest of approximately 5 MMBF. The remaining harvested timber would be hauled to existing LTF's on Twelvemile Arm and Polk Inlet. The existing logging camp at Polk Inlet is all that would be required to support the harvest of approximately 114 MMBF. Harvest of the remaining 5 MMBF would require the support of a floating camp near Sunny Cove.

### Alternative 4

**Framework**—The framework of this alternative is to emphasize timber economics and conventional cable yarding methods with the requirement of harvesting approximately 125 MMBF. This entry proposes limited helicopter timber harvest. This approach emphasizes a positive net economic return for the proposed harvest units, by attempting to minimize logging and road construction costs.

**Outputs**—Alternative 4 schedules the harvest of 87 individual harvest units, totaling 112 MMBF of sawlog and utility volume from 3,913 acres. Average unit size would be about 45 acres and 3 units would exceed 100 acres. In addition to the unit volume, 7 MMBF of road right-of-way volume would be harvested, for a total of 119 MMBF of sawlog and utility volume. Of this harvest, 259 acres are planned for partial cutting; the remainder are planned for clearcut harvest. The retention of reserve trees is planned to varying degrees in all units proposed for clearcutting. To implement this level of harvest, 54 miles of new road would be constructed and 1 mile of existing road would require reconstruction. Alternative 4 schedules 471 acres in 9 units for helicopter yarding. Preliminary analysis indicates a net mid-market stumpage value of \$33.23 to \$37.73 per MBF.

One new LTF would be needed near Chomly on the West Arm of Cholmondeley Sound for the harvest of approximately 5 MMBF. The remaining harvested timber would be hauled to existing LTF's on Twelvemile Arm and Polk Inlet and to the LTF's already scheduled for development on the west side of McKenzie Inlet and near Little Coal Bay. The existing logging camp at Polk Inlet would support the harvest of approximately 104 MMBF. A floating camp near Chomly would be required to support 5 MMBF of the remaining harvest and the floating camp to be developed near Little Coal Bay for 1989-94 harvest would be needed to support the remaining 10 MMBF.

### Alternative F5

**Framework**—The framework for Alternative F5 emphasizes retaining large contiguous blocks of old-growth areas for wildlife habitat and the corridors important for maintaining their connectivity. It includes larger Habitat Conservation Areas and wider corridors (which would be managed to maintain their functionality as corridors) than for Alternative F2. It emphasizes a deferral of harvest within the most valuable wildlife habitats, as well as the most valuable subsistence use areas, and seeks to minimize the effects of forest fragmentation. It avoids harvest in most areas of previously mapped old growth (retention and extended rotation). However, it permits harvesting in those previously mapped old-growth areas that are in partially fragmented land. It also avoids harvest in the Fubar Creek watershed.

**Outputs**—Implementation of this alternative would schedule the harvest of 3,306 acres in 71 harvest units for approximately 84 MMBF of sawlog and utility volume. Average unit size

would be about 47 acres and 4 units would exceed 100 acres. In addition to the unit volume, 4 MMBF of road right-of-way volume would be harvested, for a total of 88 MMBF of sawlog and utility volume. Of this harvest, 319 acres are planned for partial cut; the remainder are planned for clearcut harvest. The retention of reserve trees is planned to varying degrees in all units proposed for clearcutting. To implement this level of harvest, 37 miles of new road would be constructed. Alternative F5 schedules 803 acres in 19 units for helicopter yarding. Preliminary analysis indicates a net mid-market stumpage value of \$29.16 to \$39.99 per MBF.

No new LTF's would be needed. Harvested timber would be hauled to existing LTF's on Twelvemile Arm and Polk Inlet and to the LTF already scheduled for development at Little Coal Bay. The existing logging camp at Polk Inlet is all that would be required to support the harvest of approximately 78 MMBF. Harvest of the remaining 10 MMBF would require the support of a floating camp near Little Coal Bay; this camp would need to be developed to support the 1989-94 authorized harvest as well.

### Environmentally Preferred Alternative

There is no single factor that can be used to determine which alternative is environmentally preferred. Maintaining the basic productivity of the land and the quality of lifestyle of the local residents are vitally important.

Based on the comparison of the alternatives shown in the Table 1 and as displayed in Chapter 4 of the Final EIS, Alternative 1a, the No Action/No Harvest alternative, would cause the least environmental disturbance and is therefore the environmentally preferred alternative of all the alternatives considered in detail.

Of the action alternatives, Alternative F5, would cause the least adverse environmental effects because of the extensive old-growth retention strategy proposed. However, the Selected Alternative, with modification, has only slightly greater adverse environmental effects than Alternative F5. Each of these alternatives would cause significantly fewer environmental effects than either Alternative 3 or 4.

## Administrative Record

The Administrative Record for this project includes the Draft EIS, Final EIS, Tongass Land Management Plan, Alaska Regional Guide, and all material incorporated by reference including the planning record.

## Mitigation

Mitigation measures are prescribed to avoid, reduce, minimize, or rectify the adverse affects of actions. These measures were applied in the development of the project alternatives, including the Selected Alternative, through avoidance of specific geographic areas, and in the design of the harvest units and road corridors. The Mitigation Measures section of Chapter 2 of the Final EIS discusses the mitigation measures for all alternatives.



Table 1

**Site-Specific Mitigation Measures Incorporated into Unit and Road Design for the Selected Alternative<sup>1/</sup>**

Mitigation Measure	Description	No. of Units Affected in Selected Alternative <sup>2/</sup>
<b>Minerals and Caves</b>		
M1	Protect all known mineral improvements, such as mine claim markers, by specifications in timber sale and road construction contracts.	3
M2	Develop and implement site-specific protective measures for cave and karst features containing significant resources. In addition, conduct a karst vulnerability analysis for the entire Project Area and protect any significant karst resources identified.	1
<b>Fish, Water Quality, and Soils</b>		
F1	Modify unit design to avoid very high mass movement areas (BMP 13.5), and areas dominated by McGilvery soils.	22
F2	Avoid road construction in areas of very high mass movement potential resulting in the need for helicopter yarding.	9
F3	Require partial- to full-suspension logging systems in areas with high mass movement potential or McGilvery soils (BMP 13.9).	33
F4	Modify unit design or logging system to avoid or minimize damage to muskegs or other wetlands (BMP's 12.5 and 13.15).	14
F5	Establish no-harvest and selective-cut buffers along streams and around lakes to protect riparian management areas (BMP 12.6). This includes TTRA minimums and additional area as described in the Stream and Lake Protection Management Prescription.	39
F6	Require split-yarding and directional felling along selected Class III streams with no buffers to provide for streambank and stream channel protection (BMP 12.7 and 13.16).	32
F7	Permit no harvest within steep V-notch streams with high erosion potential (BMP 13.16).	8
F8	Implement measures to reduce surface erosion and drainage interruption related to transportation including water barring and cross-draining roads, using ditches and culverts to prevent water running long distances over roads, seeding and fertilizing cut and fill slopes, and locating and designing landings for good drainage and dispersion of water (BMP's 13.10 14.3, 14.5, 14.8, 14.9, 14.11, 14.12, 14.13).	61
F10	Establish timing restrictions for instream road construction activities to avoid impacts on fish populations (BMP 14.6).	5

1/ Refer to the appropriate section in Chapter 4 of the Final EIS for a more complete description of each measure.

2/ Refer to Appendix B of the Final EIS for a specific listing of the units affected.

Table 1 (continued)

**Site-Specific Mitigation Measures Incorporated into Unit  
and Road Design for the Selected Alternative<sup>1/</sup>**

Mitigation Measure	Description	No. of Units Affected in Selected Alternative <sup>2/</sup>
<b>Vegetation and Timber</b>		
T1	Conduct partial harvest by helicopter to maintain yellow-cedar trees in the unit to provide seed and shelter to maintain high yellowcedar composition in future stand.	3
<b>Wildlife</b>		
W1	Provide for greater habitat diversity on a stand level by leaving no-cut islands or fingers of timber.	16
W2	Provide for greater structural diversity on a stand level by partial cutting all of most of the harvest unit.	12
W3	Provide for greater structural diversity on a stand level by leaving nonmerchantable trees and safe snags over the entire harvest unit.	24
W4	Provide for snag retention and greater structural diversity on a stand level by prescribing and contractually requiring a specified number of reserve trees including snags and live tree replacements along the harvest unit edges and internal setting boundaries. Also leave safe-snags and nonmerchantable, reserve trees along harvest unit edges and internal setting boundaries through contractual recommendations.	15
W5	Provide for snag retention and greater structural diversity on a stand level by leaving safe snag and nonmerchantable reserve trees along harvest unit edges and internal setting boundaries through contractual recommendations.	43
W6	Lengthen the productive stage of young growth forests as wildlife habitat and increase structural diversity of young growth forests on a stand level by conducting variable tree spacing pre-commercial thinning on an experimental basis.	19
W8	Restrict the timing of helicopter logging and/or helicopter flight paths and blasting near bald eagle nest sites when occupied.	3
W9	Conduct goshawk surveys at harvest units in the Old Franks Creek drainage where goshawk presence is suspected and implement Region 10 goshawk management guidelines, as appropriate, if nesting is identified.	12
W10	Implement road closures immediately after harvest to minimize human disturbance to wildlife and road access by hunters in specific areas.	3
W11	Restrict harvest and road construction activities in areas and during time periods when Vancouver Canada goose nesting or trumpeter swan wintering might be disturbed.	15

Table 1 (continued)

**Site-Specific Mitigation Measures Incorporated into Unit  
and Road Design for the Selected Alternative<sup>1/</sup>**

<b>Mitigation Measure</b>	<b>Description</b>	<b>No. of Units Affected in Selected Alternative<sup>2/</sup></b>
W12	Restrict Forest Service-authorized boat traffic and aircraft flights in the vicinity of the Steller sea lion haulout at Kasaan Point on Grindall Island.	*
W13	Restrict Forest-Service authorized boat traffic and aircraft flights in the known vicinity of humpback whales and properly dispose of cables from inactive LTF sites.	*
<b>Visual Resources</b>		
V1	Modify unit boundaries to allow harvest unit to meet proposed VQO's in partial retention/retention areas.	1
V2	Conduct partial cutting of unit to minimize visual contrast with adjacent areas.	7
V3	Leave behind all nonmerchantable trees after clear-cutting to minimize visual contrast with adjacent areas.	3
V4	Conduct partial cutting along harvest unit and setting boundaries to reduce visual contrast with adjacent areas.	3
V5	Manage views from the proposed recreational developments at the head of Twelvemile Arm by careful siting, maintaining roadside screening and screening of harvest units, and opening views to areas with high scenic quality.	1
<b>Recreation</b>		
R1	Avoid harvesting or use partial cutting in the immediate vicinity of One Duck Lake, trail, and shelter to minimize effects on the recreational experience.	1
R2	Provide for public access, parking, and sufficient turn-outs and signage for safety along logging roads near an unnamed lake east of Polk Inlet.	2
R4	Require all road construction slash and debris from right-of-way (ROW) clearing along roads to be used for recreational access, to be buried in the road prism or hauled to a designated disposal area.	2

\* These measures potentially affect all harvest units.



Mitigation measures applicable to the Selected Alternative include mitigation measures contained in the standards and guidelines of the Tongass Land Management Plan of 1979 (as amended), draft Tongass Land Management Plan Revision, Alaska Regional Guide, and applicable Forest Service Manuals and Handbooks. The Final EIS includes Harvest Unit Design Cards (Appendix E) and Road Cards (Appendix F) which incorporate site-specific mitigation. These measures are adopted as part of this decision. Integrated silvicultural prescriptions have also been developed, which further specify mitigation direction for each unit (an example is provided in Appendix G).

All practical means to avoid or minimize adverse environmental effects of the Selected Alternative have been adopted. Measures have been included to protect, enhance, and restore resources affected by timber harvest and related actions. The Forest Service has the authority through the KPC Long-term Timber Sale Contract and other permit requirements or authorities, to enforce and implement adopted mitigation measures and the monitoring necessary to ensure the effectiveness of the mitigation. The site-specific mitigation measures listed in Table 1 are authorized for application to the Polk Inlet Project Area. The specific units in which the measures apply are listed in Appendix B of the Final EIS, as well as on the Unit and Road Cards.

## Monitoring and Enforcement

A monitoring program is the process by which the Forest Service can evaluate whether or not the resource management objectives of the Final EIS have been implemented as specified, and whether or not the steps identified for mitigating the environmental effects were effective. Three levels of monitoring are recognized. The first level, implementation monitoring, is routinely conducted at the project level and covers basically all project activities. This is guided by the Unit and Road Cards for each proposed activity and the associated guiding documents, such as the Integrated Silvicultural Prescriptions for each unit. The second and third levels, effectiveness and validation monitoring, are conducted at the Forest-wide level. Effectiveness and validation monitoring are guided by the Ketchikan Area Monitoring Strategy. A more detailed discussion of monitoring is provided in Chapter 2 of the Final EIS.

Project-specific effectiveness and validation monitoring recommendations for the Polk Inlet Project are described in Chapter 2 of the Final EIS. For each monitoring item, an objective, desired result, method of measurement, threshold and corrective action are identified, along with the responsible staff.

Monitoring activities may reveal results that deviate from planned effects, in which case corrective actions are prescribed (40 CFR 1505.2(c)).

The Ketchikan Area Forest Supervisor is responsible for ensuring that project implementation, mitigation, monitoring and enforcement is accomplished as specified.



# Findings Required By Law

### National Forest Management Act

The National Forest Management Act (NFMA) requires specific determinations in this Record of Decision including consistency with existing Forest Plans and Regional Guides. It also requires a determination of clearcutting as the optimal method of harvesting and specific authorization of clearcuts over 100 acres in size.

### Tongass Land Management Plan and Alaska Regional Guide

This decision is consistent with the Alaska Regional Guide and the Tongass Land Management Plan of 1979 (as amended). I have reviewed the management direction, standards and guidelines, and the schedule of activities for the VCU's included in the Selected Alternative, and find the Selected Alternative to be consistent with these elements. The areas of undisturbed old-growth wildlife habitat maintained in this alternative exceed the standards for retention established in the TLMP.

Although not required, the activities authorized in this decision are consistent to the extent practicable with the proposed standards and guidelines and management prescriptions of the Supplement to the Draft EIS for the TLMP Revision.

### Clearcutting as the Optimal Method of Harvesting

The Alaska Regional Guide established silvicultural and management standards for the western hemlock-Sitka spruce forest type (Alaska Regional Guide, page 318). Even-aged management in the form of clearcutting is, according to the Regional Guide, to be used where the management objective is to meet timber production objectives established in the Forest Plan, where there is a risk of dwarf mistletoe infestation, and where risk of windthrow is determined to be high. Most of the harvest units being proposed in the Selected Alternative have a high risk of windthrow. Most units in the Selected Alternative, except those discussed in the previous Decision section, are prescribed for clearcut harvest. Clearcutting of the proposed harvest units will meet the objective of maintaining fast-growing, mistletoe-free stands of mixed species and is the optimum method of harvesting, considering the following factors referenced in the Alaska Regional Guide:

1. The thin bark and shallow roots of hemlock and spruce make them particularly susceptible to logging injury, which leads to decay. Losses from decay fungi are high, especially in the old-growth forests of Alaska. Conversion from old to young growth by clearcutting has the greatest potential for reducing decay.
2. Hemlock dwarf mistletoe, *Arceuthobium tsugense*, a common disease of western hemlock, can best be controlled by clearcutting. Elimination of residual overstory trees infected with dwarf mistletoe prevents infestation of western hemlock in the new stand.
3. Exposure to the sun raises soil temperature, which speeds decomposition, thereby improving the productivity of most sites.
4. Clearcutting favors regeneration of Sitka spruce by destroying advance hemlock regeneration and by creating more favorable conditions for post-logging reproduction of spruce.

5. Risk of blowdown in residual stands is eliminated. The chance of blowdown along cutting boundaries is increased but can be reduced through proper design of cutting units.
6. Natural seed fall is generally adequate for regeneration and most young stands are dense.
7. Logging costs are lower than with other systems.

### Clearcuts Over 100 Acres in Size

There are a total of four units or combinations of units which exceed 100 acres in the Selected Alternative. Three are planned for clearcutting (Type D clearcuts) and one is planned for partial cutting. Chapter 4 of the Final EIS identifies these units or combinations of units and lists the reasons for exceeding 100 acres. These units were displayed for public review for more than 45 days after release of the Draft EIS in which the public could comment on these units over 100 acres. This 45-day public comment period meets the requirements of the Alaska Regional Guide for approval of units over 100 acres. Based on public review and the statements of reasons listed for the units greater than 100 acres in Chapter 4 of the Final EIS, these units are authorized for harvest as designed.

### Tongass Timber Reform Act

Harvest units were designed and will be located to maintain a minimum 100-foot buffer zone for all Class I streams and Class II streams which flow directly into Class I streams as required in Section 103 of the TTRA. As discussed previously in the Mitigation section of this ROD, the actual widths of these buffer strips will often be greater than the 100-foot minimum. The design and implementation direction for the Selected Alternative incorporate BMP's for protection of all stream classes.

In accordance with Section 301(c) of TTRA, which modified the KPC Long-term Timber Sale Contract, the Polk Inlet Project was planned, management requirements were applied, and environmental analysis procedures were followed consistent with procedures for independent National Forest timber sales. Analysis of the proportion of Volume Classes 6 and 7 planned for harvest was also performed. It was determined that upon completion of the Selected Alternative's harvest, proportionality consistent with the requirements of the TTRA for Management Areas K17 and K18 as described in the Forest Service Sale Preparation Handbook will result. Refer to the Vegetation and Timber Resources section of Chapter 4 of the Final EIS for the full analysis.

### Endangered Species Act

I have determined that this action will not have any adverse impacts on any threatened or endangered species. Actions authorized in the Selected Alternative are not anticipated to have a direct, indirect, or cumulative effect on any threatened, endangered or sensitive species in the Polk Inlet Project Area. A complete biological assessment/evaluation is included in Appendix H of the Final EIS.

### Bald Eagle Protection Act

Management activities within 330 feet of an eagle nest site are restricted by a Interagency Agreement between the Forest Service and the U.S. Fish and Wildlife Service to facilitate compliance with the Bald Eagle Protection Act. The Selected Alternative does not include any timber harvest or road construction within 330 feet of any bald eagle nest sites.



# Record of Decision

## Clean Water Act

The design of harvest units and roads for the Selected Alternative were guided by standards, guidelines, and direction contained in the current TLMP, the TLMP Draft Revision, Alaska Regional Guide, and applicable Forest Service manuals and handbooks. The Harvest Unit Design Cards and Road Design Cards contain specific details on methods prescribed to prevent or reduce nonpoint sediment sources. Reasonable implementation with site-specific application and monitoring of approved BMP's is expected to comply with applicable State Water Quality Standards Regulations. These regulations provide for variances from anti-degradation requirements and water quality criteria. The harvest and road building operators will be responsible for compliance, including obtaining any variance required by the State, and will be monitored for compliance by the Forest Service. The Forest Service expects the Polk Inlet Project Area activities will fully qualify for any variance required by the State, according to the criteria in 18 AAC 70.015.

The Environmental Protection Agency has established normal conditions including monitoring as a part of the permitting process for log transfer facilities.

## National Historic Preservation Act

Cultural resource surveys have been conducted in the Project Area. The State Historical Preservation Officer has been consulted, and the provisions of 36 CFR part 800 are being complied with. Forest Service timber sale contracts contains enforceable measures for protecting any undiscovered cultural resource that might be encountered during sale operations. No ground disturbing activities associated with this action will occur before a cultural resource clearance for that specific area has been given. I have determined, consistent with the Chief's direction on cultural resources, that there will be no significant effects on cultural resources.

## ANILCA Section 810

### Subsistence Evaluation and Findings

A subsistence evaluation was conducted for the six alternatives considered in detail for the proposed action in accordance with ANILCA Section 810. Open houses followed by ANILCA Section 810 hearings were held in Craig, Hollis, Hydaburg, Kasaan, Klawock, Ketchikan, and Saxman. The results from the subsistence hearings were incorporated into the development of the Selected Alternative.

The evaluation of comments from the public, subsistence hearing testimony, and additional analysis indicates that the existing condition and all alternatives currently produce a significant possibility of a significant restriction of subsistence uses for black bear and marten.

There is also a significant possibility of a significant restriction of subsistence use of deer in the Project Area in the future. Although the analysis in Chapter 4 of the Final EIS indicates that no such restriction of subsistence use in the Project Area will likely occur through 2004; increased demand, and cumulative effects of future actions may at some point result in a significant restriction of subsistence use of deer in the Project Area.

Based on a review of the subsistence hearing testimony and the analysis conducted in the Final EIS, it is apparent that all of the action alternatives and the no action alternatives, involve some potential to restrict subsistence uses. There is no alternative that would meet KPC contract timber volume requirements and TLMP direction and yet avoid a significant possibility of a subsistence restriction somewhere in the Forest. Therefore, based on the analysis of the information presented in the Final EIS, it is my determination that these actions are necessary, consistent with sound management of public lands.

The amount of public land involved to implement the Selected Alternative is (considering sound multiple-use management of public lands) the minimum necessary. Conversion of old-

growth forest into second-growth forest affects habitat capability for deer and other old-growth dependent species wherever it occurs on the Tongass National Forest, and habitat is used forest-wide by such species.

The entire Tongass National Forest is used by one or more rural communities for subsistence purposes for deer hunting (TRUCS). The areas of most subsistence use are the areas adjacent to existing road systems, beaches, and the areas in close proximity to the communities. Much effort was taken to protect the highest value subsistence areas. For example, the beach fringe is one of the highest use subsistence areas and none will be impacted by the Selected Alternative.

It is not possible to lessen harvest in one area and concentrate it in another without changing the impact on one or more rural communities' important subsistence use areas. In addition, harvestable populations of game species could not be maintained in a natural distribution across the Forest if harvest were concentrated in specific areas. A well distributed population of species is also required by Forest Service regulations implementing the National Forest Management Act. Therefore, I conclude that the acres scheduled for harvest in the Selected Alternative meet sound multiple-use management of public lands and involve the minimum amount of public land used for subsistence. Furthermore, the Selected Alternative resolves resource concerns reflected in the public issues associated with this EIS.

Impacts on subsistence have been minimized through the development of the individual harvest units and road corridors, and through the formulation of the alternatives. Mitigation measures applicable to all resources including subsistence are described in this ROD. It is my determination that reasonable measures to minimize impacts on subsistence have been adopted to the maximum extent practicable while still meeting the purpose and need for this project. The Selected Alternative reflects special efforts by the Forest Service to minimize the effects on subsistence resources used by those rural communities that would be most likely to receive the highest priority for game in the event of an ANILCA Section 804 "Tier II" restriction.

### Executive Orders

#### Executive Order 11988

Executive Order 11988 directs Federal agencies to take action to avoid, to the extent possible, the long and short-term adverse impacts associated with the occupancy and modification of floodplains. The numerous streams in the Polk Inlet Project Area makes it impossible to avoid all floodplains during timber harvest and road construction. The design of the proposed developments and the application of Best Management Practices combine to minimize adverse impacts on floodplains.

#### Executive Order 11990

Executive Order 11990 requires Federal agencies to avoid, to the extent possible, the long and short-term adverse impacts associated with the destruction or modification of wetlands. The Selected Alternative avoids most identified wetlands; however, many small wetlands or muskegs occur as inclusions within forested areas. These areas may be altered by timber harvest or road construction. Techniques and practices required by the Forest Service serve to maintain the wetland attributes including values and functions. It is estimated there will be only minimal loss of wetlands with any of the alternatives. Soil moisture regimes and vegetation on some wetlands may be altered in some cases; however, these altered acres would still be classified as wetlands and function as wetlands in the ecosystem.

### Coastal Zone Management Act

The Coastal Zone Management Act of 1972 (CZMA), while specifically excluding Federal lands from the coastal zone, requires that a Federal agency's activities be consistent with the



## Record of Decision

enforceable policies of a state's coastal management program to the maximum extent practicable when that agency's activities affect the coastal zone.

The standards and guidelines for timber management activities in the Polk Inlet Project Area meet or exceed those indicated in the Alaska Forest Practices Act and the Alaska Coastal Management Program (ACMP).

I have determined that the proposed activities are consistent with the Alaska Coastal Management Program to the maximum extent practicable. The Office of Governmental Coordination will do a consistency review of the Selected Alternative, and will concur with, or object to, this determination.

Federal and State permits necessary to implement the authorized activities are listed at the end of Chapter 1 of the Final EIS.

### Federal and State Permits

## Implementation Process

Implementation of this decision may occur no sooner than 50 days after the date of publication of the notice of decision and availability of the Final EIS in the Federal Register, or 50 days following publication of the legal notice of the decision in the Ketchikan Daily News, published in Ketchikan, Alaska, whichever is later.

This project will be implemented in accordance with Forest Service Manual and Handbook direction for Timber Sale Project Implementation in FSM 2431.3 and FSH 2409.24. This direction provides a bridge between project planning and implementation and will ensure execution of the actions, environmental standards, and mitigations approved by this decision, and compliance with the TTRA and other laws.

Implementation of all activities authorized by this Record of Decision will be monitored to ensure that they are carried out as planned and described in the Final EIS and ROD and Unit Design and Road Cards unless modified consistent with direction in the Forest Service Manual.

Appendix E of the Final EIS contains the Harvest Unit Design Cards and Appendix F contains the Road Design Cards. These cards are an integral part of this decision because they document the specific resource concerns, management objectives, and mitigation measures to govern the layout of the harvest units and construction of roads. These cards will be used during the implementation process to assure that all aspects of the project are implemented within applicable standards and guidelines and that resource impacts will not be greater than those described in the EIS. All Unit and Road Cards have been field-verified; however, minor changes in location are likely during final layout. Similar cards will be used to document any changes to the planned layout, as the actual layout and harvest of the units occurs with project implementation. The implementation record for this project will display each harvest unit, transportation facility, and other project components as actually implemented; any proposed changes to the design, location, standards, and guidelines, or other mitigation measures for the project; and the decisions on the proposed changes.

## Process for Change During Implementation

Proposed changes to the authorized project actions will be subject to the requirements of the National Environmental Policy Act (NEPA), the National Forest Management Act of 1976 (NFMA), Section 810 of the Alaska National Interest Lands Conservation Act (ANILCA), the Tongass Timber Reform Act (TTRA), the Coastal Zone Management Act (CZMA), and other laws concerning proposed actions.

No changes requiring modification of the KPC Long-term Timber Sale Contract or other existing contracts or permits will be approved without the signature of the contracting or permitting officer or his/her successor or superior.

In determining whether and what kind of further NEPA action is required, the Forest Supervisor will consider the criteria for whether to supplement an existing Environmental Impact Statement (EIS) in 40 CFR 1502.9(c), and in particular, whether the proposed change is a substantial change to the intent of the Selected Alternative as planned and already approved, and whether the change is relevant to environmental concerns. The Forest Supervisor will consider whether an Environmental Assessment (EA) should be prepared to determine whether a supplement to the existing EIS is required, or whether the change is categorically excluded from preparation of an EIS or EA on the basis of the criteria in FSH 1909.15. Connected or interrelated proposed changes regarding particular areas or specific activities will be considered together in making this determination. Cumulative impacts will be considered.

The intent of field verification was to determine the feasibility of a unit or road, not to locate final boundaries or road locations. Minor changes are expected during implementation to better meet on-site resource management and protection objectives. Minor adjustments to unit boundaries are also likely during final layout for the purpose of improving logging system efficiency. This will usually entail adjusting the boundary to coincide with logical logging setting boundaries. Many of these minor changes may be categorically excluded from documentation in an EA or EIS and will not present sufficient potential impacts to require any specific documentation or other action to comply with other laws. Some minor changes may still require appropriate scoping, environmental analysis, documentation in a Decision Memo, and public notice to comply with FSH 1909.15

### Right To Appeal

This decision is subject to administrative appeal. Organizations or members of the general public may appeal this decision according to Title 36 Code of Federal Regulations (CFR) Part 215. The appeal must be filed within 45 days of the date that legal notification of this decision is published in the Ketchikan Daily News, the official newspaper of record. The Notice of Appeal must be filed with:

Phil Janik, Regional Forester  
Forest Service  
U.S. Department of Agriculture  
P.O. Box 21628  
Juneau, AK. 99802-1628

It is the responsibility of those who appeal a decision to provide the Regional Forester sufficient written evidence and rationale to show why the decision by the Forest Supervisor should be changed or reversed. The written notice of appeal must:

1. State that the document is a Notice of Appeal filed pursuant to 36 CFR part 215;
2. List the name, address, and, if possible, a telephone number of appellant;
3. Identify the decision document by title and subject, date of the decision, and name and title of the Responsible Official;
4. Identify the specific change(s) in the decision that the appellant seeks or portion of the decision to which the appellant objects;
5. State how the Responsible Official's decision fails to consider comments previously provided, either before or during the comment period specified in {215.6 and, if applicable, how the appellant believes the decision violates law, regulation, or policy.

The first timber offering is planned to be made available as part of the current timber supply in fall 1995.



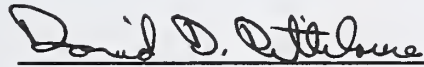
## Contact Person

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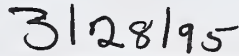
For additional information concerning the specific activities authorized with this decision contact the Ketchikan Area Planning Staff Officer.

David Arrasmith  
Planning Staff Officer  
Ketchikan Area, Tongass National Forest  
Federal Building  
Ketchikan, Alaska 99901

(907) 225-3101



DAVID D. RITTENHOUSE  
Forest Supervisor, Ketchikan Area  
Tongass National Forest



Date



# Appendix

## Revised Unit Design Cards







# **Appendix**

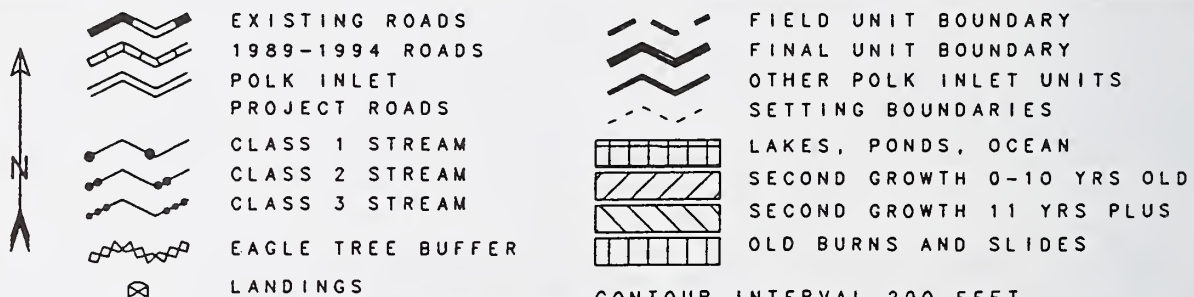
## **Revised Unit Design Cards**

# POLK INLET PROJECT HARVEST UNIT DESIGN CARD

VCU: 622

UNIT: 269

QUAD: B3NE



CONTOUR INTERVAL 200 FEET

SCALE 1:12000 1 INCH = 1000 FEET





POLK INLET PROJECT HARVEST UNIT DESIGN CARD

VCU #: 622	UNIT #: 269	QUARTER QUAD: CRGB3NE	PHOTO YR/#: 1991/1090-48
ACRES: 44	VOL.: 1220 MBF	LOGGING SYSTEM: HELICOPTER	

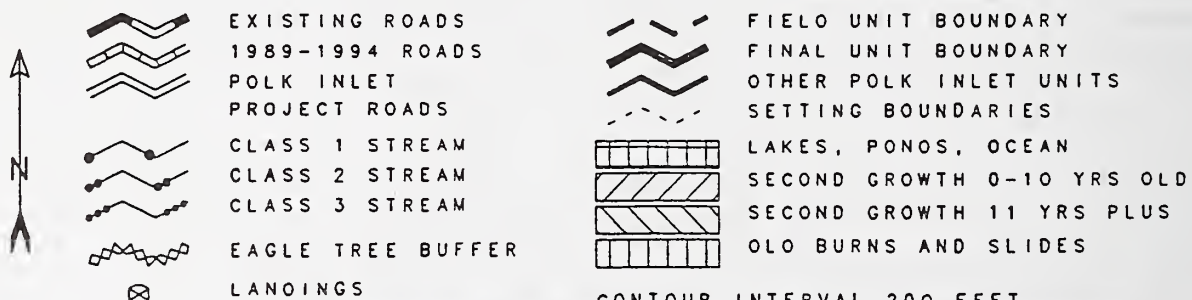
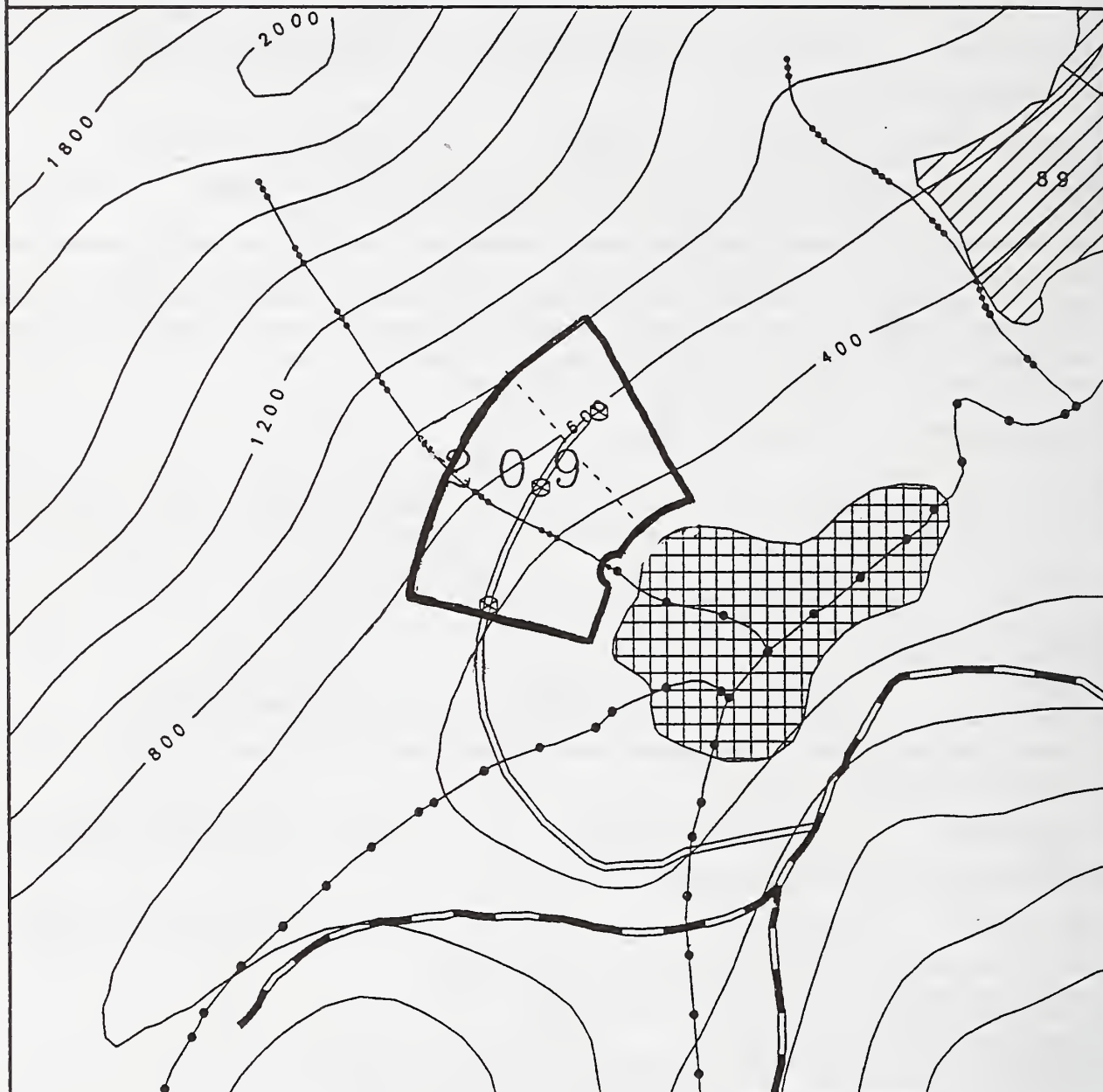
Timber/Silviculture	Field Review: R. Schmeling 6-29-92	Office Review: J. Mehrwein
McGilvery soils noted. Slide at plot #3.		
Logging/Transportation	Field Review: L. Yu 7-8-92	Office Review: J. Mehrwein
Logging system was changed to helicopter, avoiding the need for additional road development. Logs would be yarded back to road built for 1989-94 harvest. Original road notes are summarized as follows: \$120,000/mile + \$145,000/mile roads. No concerns, possibility of extending 32A spur for future development. This road is located higher than that shown on the paper plan. This was done to use the best crossing across the creek canyon. The main problem with this segment is the slide; 900 feet north of the crossing. No landings on this segment. No problems with this road. The high location is a result of the high bridge crossing. The road notes for this segment are in the 621-268 file. The standing skyline system is best for these settings because of 1500' yarding in the north end of the unit. No concerns. Some log decking on steep grades.		
Watershed/Fisheries	Field Review: J. Knutzen 6-29-92	Office Review: T. Stewart
No streams in unit. Class II stream along west boundary needs 100 foot buffer as it flows into Class I stream (BMP 12.6). This stream is V-notch at top half of unit, and needs to be buffered to top of ridge. Currently flagged with 100 to 400 foot buffer, which could be moved closer to stream in lower portion without adverse water quality effects.		
Soils/Geology	Field Review: J. Knutzen 6-29-92	Office Review: T. Stewart
Some steep areas (greater than 70%) in mid-northwest region with small slumps, but appears not to be of concern. Most of unit 30 to 70% slope.		
Wildlife	Field Review: J. Knutzen 6-29-92	Office Review: R. Fairbanks
Moderate to light deer and bear use. Recommend leaving live reserve trees and snags where possible to maintain habitat structure and snag density.		
Visual/Recreation	Field Review: M. McGown	Office Review: M. Greenig, M. McGown
Not visible from priority travel route/use areas.		
Other Resources	Field Review:	Office Review: J. Lobdell, M. Greenig
Cultural - Unit outside of high probability areas for cultural resources. Lands - No state/private or encumbered lands occur adjacent to unit.		
Interdisciplinary Team Recommendations	Reviewed By: R. Fairbanks, T. Stewart	
Clearcut using helicopter yarding, leaving nonmerchantable timber and safe snags throughout the entire harvest unit (Type C clearcut), to maintain structure and snags for wildlife. Maintain 100 to 400-foot buffer along Class II stream on the west.		

# POLK INLET PROJECT HARVEST UNIT DESIGN CARD

VCU: 620

UNIT: 209

QUAD: B2SW



CONTOUR INTERVAL 200 FEET

SCALE 1:12000 1 INCH = 1000 FEET





POLK INLET PROJECT HARVEST UNIT DESIGN CARD

VCU #: 620	UNIT #: 209	QUARTER QUAD: CRGB2SW	PHOTO YR/#: 1991/290-89
ACRES: 57	VOL.: 2978 MBF	LOGGING SYSTEM: HIGHLEAD	

Timber/Silviculture	Field Review: S. Allen 8-6-92	Office Review: J. Mehrwein
Southern part of unit (S. of creek) contains draws and areas of loose rock, along with large patches of brush. The north half is cleaner, less brush, no creeks. Timber is good quality, some very tall trees, good spacing, at times large gaps in canopy with brush and regen. East boundary is on large lake, active beaver colony. Toward top of unit is large patch (approx. 5 acres) of regen. Possibly old slump/blowdown. Some mistletoe was evident (minor).		
Logging/Transportation	Field Review: R. Doering 7-29-92	Office Review: J. Mehrwein
10% adverse to get down from built road. 22' span across a fish creek (Class I or II). Some heavy rock, full bench construction west of lake. Three highlead landings. Some high volume spruce patches. Good guyline and tailhold stumps. Can rig up backline trees (up to 3' dia. spruce) for extra deflection. Good tailholds and guyline stumps. Boundary not yet defined. Unit may go R/S with adequate deflection. Road grade suitable for R/S. Above average road construction. 22' span on creek into lake.		
Watershed/Fisheries	Field Review: E. Ablow 9-17-92	Office Review: T. Stewart
A Class I lake forms the eastern boundary of the unit. Sockeye salmon were found in the lake. Blue and white flagging was used to flag the 500 foot buffer above the lake. Selective cutting from the 500 to 100 foot buffer is allowed (BMP 12.6). A Class III stream bisects unit. Stream banks appear unstable. Harvest only to slope break, fall trees away from stream, and split-yard away from channel (BMP 13.16). This Class III stream becomes Class I for about 100 feet within the unit (approximately 300 feet upstream from the lake), and requires a 100 foot buffer (BMP 12.6) which was not flagged in the field.		
Soils/Geology	Field Review: E. Ablow 9-17-92	Office Review: T. Stewart
Moderate to steep slopes. Few stability problems. Stream banks of Class III stream are loose and unstable; formed in colluvium.		
Wildlife	Field Review: E. Ablow 9-17-92	Office Review: R. Fairbanks
Heavy deer and bear use throughout the unit. Sockeye salmon carcasses with tear and teeth marks near base of unit. Beaver dams nearby in upper end of lake. Recommend leaving live reserve trees and snags where possible to maintain habitat structure and snag density.		
Visual/Recreation	Field Review: M. McGown	Office Review: M. Greenig, M. McGown
Not visible from priority travel route/use areas.		
Other Resources	Field Review:	Office Review: J. Lobdell, M. Greenig
Cultural - Unit outside of high probability areas for cultural resources. Lands - No state/private or encumbered lands occur adjacent to unit.		
Interdisciplinary Team Recommendations	Reviewed By: R. Fairbanks, T. Stewart	
Partial-cut the entire unit in order to increase the effectiveness of the small HCA located in the Dog Salmon Creek drainage to the north and its connectivity to retention blocks south of the unit. Selective cutting was originally prescribed within 500 feet of the lake and is now expanded due to landscape considerations. Harvest only to slope break of class III stream and fall trees away from stream. Maintain a 100-foot buffer on both sides of Class I stream segment (approximately 300 feet upstream of lake). Because of the proximity of the unit to the lake, evaluate potential for disturbance and restrict harvest activities in areas and during time periods when Vancouver Canada goose nesting might be disturbed. Partial suspension may be necessary, due to slope steepness. Reevaluate logging system relative to suspension requirements and partial cutting requirement during final layout.		





USDA FOREST SERVICE - ALASKA REGION

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# oolk Inlet Record of Decision

## Legend



Project Unit Pool



Selected Alternative Units



Second Growth

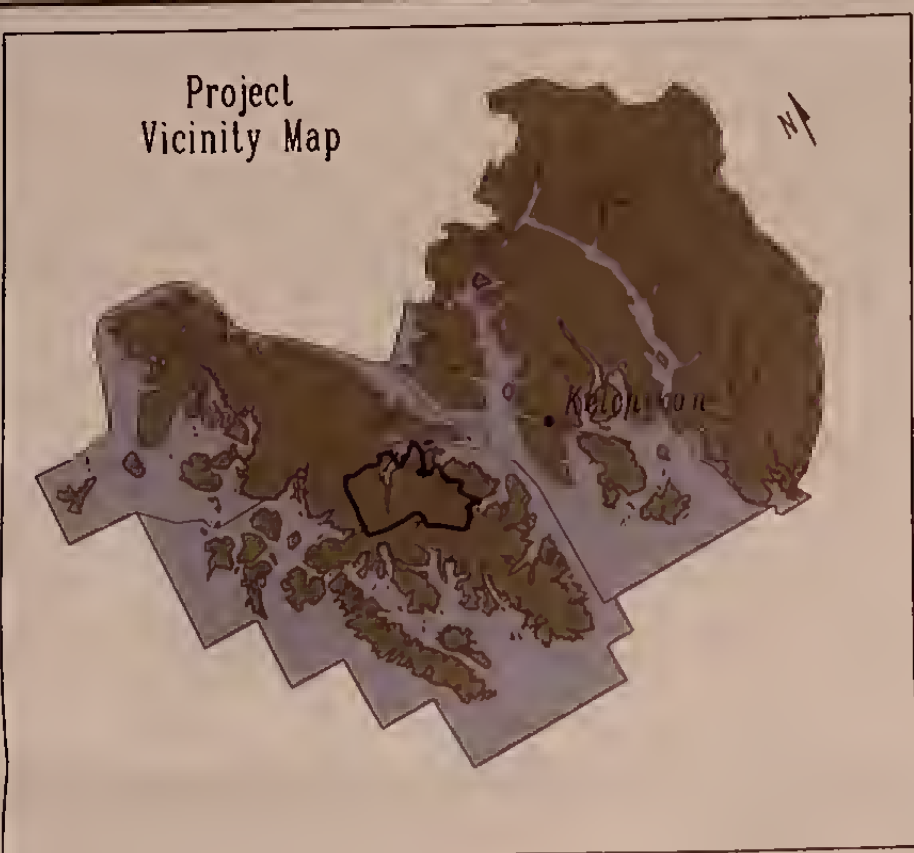


Low Volume Old Growth (8-30mbf/acre)





Project  
Vicinity Map



USDA FOREST SERVICE - ALASKA REGION  
Polk Inlet Record of Decision

Legend

- Project Unit Pool
- Selected Alternative Units
- Second Growth
- Low Volume Old Growth (8-30mbf/acre)
- High Volume Old Growth (>30mbf/acre)
- Other National Forest System Lands
- Encumbered Lands
- State/Private Lands
- Existing Roads (including 1989-94)
- Unit Pool Roads
- Selected Alternative Roads
- Streams
- VCU Boundaries
- Potential Log Transfer Facilities (not in selected alternative)
- Existing Log Transfer Facilities (including 1989-94)

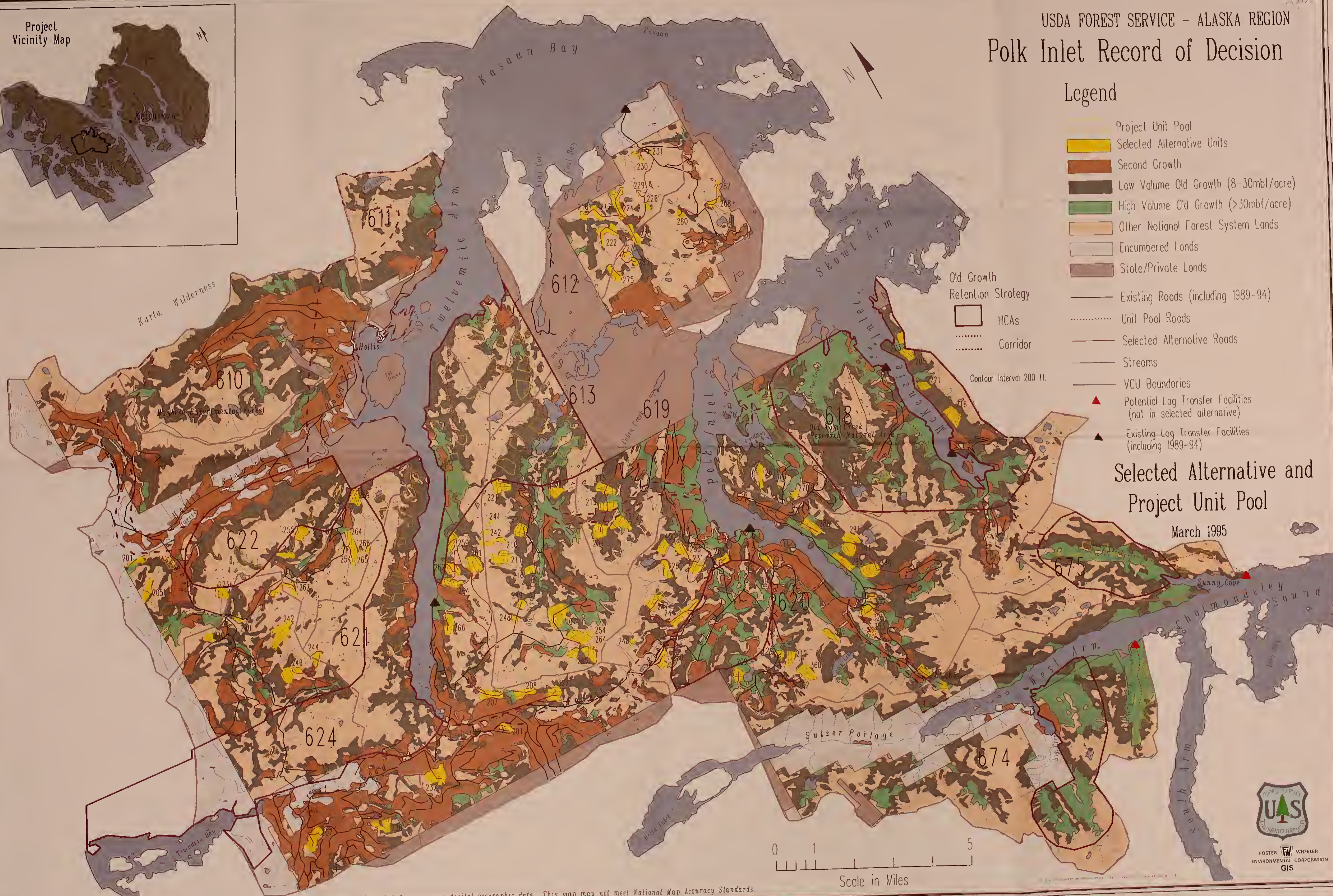
Old Growth  
Retention Strategy

- HCAs
- Corridor

Contour Interval 200 ft.

Selected Alternative and  
Project Unit Pool

March 1995



0 1 5  
Scale in Miles



FOSTER WHEELER  
ENVIRONMENTAL CORPORATION  
GIS

NOTE: Compiled from various digital geographic data. This map may not meet National Map Accuracy Standards.



